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## NASA Chief Balks at New Budget Cut Order

With the space-science program in financial tatters, the National Aeronautics and Space Administration is appealing directly to the President's inner circle to escape demands by the Office of Management and Budget for additional budget cuts.

NASA officials, claiming that the proposed reductions would virtually obliterate planetary exploration and other fundamental research activities, say they have even refused to talk to OMB about ways to cut about \$1 billion from a proposed budget of \$7 billion for Fiscal 1983. Given the tight budgetary discipline of the Reagan Administration, that's a rare case.

The route being taken by NASA Administrator

Such a reduction, NASA agency officials claim, could virtually cripple the agency—and there are some who suspect that this may be OMB's intention, on the grounds that most of NASA's activities could be hived off to other agencies (space science to the National Science Foundation, for example) or to the private sector, leaving NASA as little more than a sophisticated "trucking" company.

Space science, which currently accounts for less than 10 percent of NASA's budget, would be among those parts of its activities which would be severely affected. Acting Associate Administrator Andy Stofan told NASA's Space Science Advisory Committee at a meet-

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### *Administration's Non-Proliferation Retreat Assailed in Senate—Page 4*

James Beggs is over the heads of both OMB and its advisory sidekick, the Office of Science and Technology Policy (OSTP), and directly to Reagan's Chief of Staff, Ed Meese, and other senior staff members. Beggs said last week that the several meetings held so far are part of a "process of educating the Administration about the value of space activity," and he said that he felt the message was getting through.

In comparison to other agencies, NASA has fared well until recently, but that's no consolation for the rapidly crumbling space-research enterprise. After Mr. Reagan's initial round of budget cuts, in March, the space agency emerged with a projected increase of 12-percent for Fiscal 1982, which started on October 1. When further cuts were proposed by Mr. Reagan in September, NASA was one of the few non-defense agencies exempted from an across-the-board cut of 12 percent. Partly in order to maintain the space shuttle program at full funding levels, NASA was recommended for a cut of only 6 percent, amounting to a budget reduction of \$367 million. And last week's budget resolution approved by Congress came out with an even smaller reduction, \$151 million.

However, it is the 1983 budget—now in final preparation—which has the space agency worried. In setting guidelines for this budget earlier in the year, OMB chief David Stockman told NASA that it should plan for a total budget of \$6 billion, \$1 billion less than the agency had been expecting.

## In Brief

November 23—the day the money stopped—the non-essential parts of the US government were supposed to close down, but the White House Office of Science and Technology Policy remained fully staffed and working. The appearance, however, was deceiving, since OSTP was moving toward a "phased shutdown." An intra-office memo directed the fed's nerve center for science policy to prepare to lock away all sensitive papers. Staffers were also told that good citizen's instincts shouldn't lure them into volunteering their services, because that's not permitted.

Meanwhile, the National Science Foundation, with a staff of about 1150, was also phasing out on Day One of the budget veto, but while most other agencies deemed non-essential were planning a total shutdown, NSF was speedily putting together plans to operate with a skeleton crew of about 10 persons. It could do this, an NSF staffer explained, because some "carry-over" money—"probably under \$1 million"—had turned up in an account not covered by the shutdown decree.

Leo Young, of the Naval Research Laboratory, has been appointed to fill the Defense Department research post previously held by George Gamota, who recently went to work for the University of Michigan. The job bears the title of Director of Research and Technical Information, but its main function is to provide policy for channeling part of the military services' bountiful research bundle to university laboratories.

## ...Space Aide Uncertain of Keyworth's Role

(Continued from page 1)

ing in Washington last week that he had presented four separate scenarios to OMB demonstrating the potential impact of cuts of the order of magnitude being suggested. Three of them would involve wiping out the planetary exploration program for the foreseeable future, including both the Galileo mission to Jupiter, planned for launch in 1985, and the Venus Orbiting Imaging Radar (VOIR), proposed as a new start last year by President Carter, but now deferred to the end of the decade.

"The biggest issue which we now face is the importance of space science to the country and to the Administration," said Stofan. He claimed that there appeared to be growing support among the public again for planetary exploration and similar missions, but that space science in the eyes of the White House and the OMB "is not something that they are concerned about at the moment. They only seem to be interested in the space-transportation system." Stofan added that he got the impression that OMB "does not believe or disbelieve [in space science]; all they seem to be interested in is adding up columns of numbers."

One of the biggest difficulties, in the eyes of NASA officials, is that there is no strong advocate for the space program in general—and space science in particular—within the White House. Support from OSTP they feel, although positive (for example, in science adviser George Keyworth's criticism of the decision to abandon NASA's half of the International Solar Polar Mission) has still been only lukewarm. Stofan says that he has talked several times to Keyworth, who has been put in charge of an overall policy review of the space program. "But I do not think at this time that he has a lot of influence with the Administration," he added.

The OSTP review will undoubtedly address many of the issues which are causing concern at NASA. It is the first major review to have been carried out on the space program since 1969, when a committee chaired by then Vice-President Spiro Agnew proposed a program that

was supposed to terminate with a manned landing on Mars between 1981 and 1984—a goal which seems as far away now as it was then.

Victor Reis, Assistant Director of OSTP who has been put in charge of the working group putting the study together, told NASA's Space Science Advisory Committee that the study will be officially completed next summer, but that some outlines of its conclusions will probably be available within the next few months.

"The Administration has a long-term commitment to space, although there may have to be an adjustment of priorities in overall space policy," Reis said. Asked why the Administration was carrying out such a study at the present time, he said that "it is when budgets are tight that you most need a policy." Another reason he suggested was that, just as the Agnew study had been intended to discuss what goals should be chosen after the successful completion of the Apollo moon-landing missions, so the completion of the experimental stage of the Space Shuttle development—"not just as a launch vehicle but as a space transportation system"—made it a good time to discuss what the next major goals in space should be.

Reis suggested that this would involve a critical evaluation of future planetary missions in scientific cost-benefit terms, in order to provide quantitative assessments for making budget choices, but admitted that this would not necessarily be simple. "The next generation of proposed scientific activities could cost about \$1 billion," he said. "That is equivalent to the annual budget of the National Science Foundation. Would we really be getting the right amount of science out of it? I am not able to make that judgment." Stating that both the scientific and the exploratory aspects of planetary exploration were important, Reis conceded, "I get confused when I put that on a scale of dollars."

The space-science community in recent months has begun to wrestle with the problem of coping with fi-

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Editor and Publisher  
**Daniel S. Greenberg**

Associate Publisher  
**Wanda J. Reif**

Circulation Manager  
**Gail A. Gallessich**

Contributing Correspondents

**David Dickson, Kim A. McDonald (Washington); Francois Segurier (Paris); Ros Herman (London)**

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## ...Low-Cost Shots: New Space Strategy

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nancial stringencies. One strategy being developed by NASA's newly created Solar System Exploration Committee would be to reduce future space-science goals to "bite-size chunks" which could each be achieved through more modest missions than the planetary spectaculars of the past decade.

Whereas a major planetary mission would now cost in the region of \$1 billion, studies are now being carried out, at NASA's Ames Research Laboratory and the Jet Propulsion Laboratory, of more limited missions which, by building directly on some of the hardware used on previous spaceflights, would cost an order of magnitude less. One approach would be to use Pioneer-type space vehicles, customarily used for terrestrial observations, to carry out surveys of the surfaces of the inner planets such as the Moon and Mars at costs estimated between \$150 million and \$200 million per mission. Another would be to use a variant of the Mariner Spacecraft to carry out studies of small bodies in the solar system such as comets and asteroids.

Breaking future missions down into smaller chunks in this way would be one way to maintain continuity in explorations without having to generate substantial political backing, either from the White House or from Congress. A possible comparison would be with the current series of Explorer satellites whose costs are in the same range—and have the advantage that, since they are not considered as major missions, do not get the intense scrutiny from Congressional committees that accompanies the more ambitious "new starts."

The Solar System Exploration Committee (SSEC) has set up four committees to discuss how this concept might be applied to the areas of small bodies, outer planets, solid-body inner planets and inner planets with atmospheres. Specific recommendations on missions that might fall into these categories are to be presented to NASA Administrator Beggs next summer. SSEC Chairman Noel Hinners, previously NASA Associate Administrator for Space Science and now Director of the Smithsonian's Air and Space Museum, says he has already discussed this strategy with officials at OMB. Although pointing out possible difficulties—such as the relative lack of public appeal—he said that in general "they liked the approach we are taking." Similarly, Reis of OSTP told last week's meeting of the Space Science Advisory Committee that "the ability to do experiments that cost less than \$1 billion has just got to be a good way to go."

Within NASA itself, the next major planetary mission is usually considered to be a sample-return project to Mars. This already has considerable support among sections of the space-science community, as well as

being considered a major crowd puller which could help to generate funds for other space activities. In particular, NASA officials are saying that such a mission would be one of the tasks that could be carried out from the manned earth-orbiting space station which is likely to be the next significant step in the space program after the Shuttle.

NASA Administrator Beggs told the Advisory Committee that when discussions of the contents of the fiscal year 1984 budget start with OMB next March, he intends to go in with a strong bid to have the orbiting space station named as a new start, emphasizing its value both for military missions (which would use it for constant surveillance of activities on the earth) and for future planetary missions, such as the proposed Mars sample return. "We are going to lay that one on them next year," said Beggs, adding that he was prepared to fight for a continued high-profile role for NASA and would strongly resist any attempts at a major reorganization—for example the suggestion that non-science NASA might be folded in with the Department of Defense.

Before that, however, the 1983 budget conflict has to be resolved. Beggs says that he has presented OMB with his "non-negotiable demands" in response to its proposed cuts, and is currently awaiting the agency's reply. He has stressed two particular arguments for why NASA should be treated differently from other government institutions. First, "that we have taken our cuts over the past ten years, during which NASA's budget has been steadily declining, and that money should therefore be taken from other people whose budgets are increasing." The second argument is that to cut back on the research and development programs essential to a long-term technological innovation plan is both short-sighted and, ultimately, self-destructive.

OMB's response to these arguments is awaited with interest. "There is still a large amount of difference between what NASA says will lead to the need for drastic action, and what OMB says we can handle," says Andy Stofan, of NASA. "The situation is still very precarious. Stockman is doing everything he can to make sure the NASA budget is as small as he can make it. I think this is going to have to be resolved in the White House."

Beggs is also cautious about the eventual outcome. "I see a chance for improvement in 1984, but the next two years are going to be tough," he says. "There is a very good chance of reversal by 1985 if the economic situation improves. If the economy does not look better in that time period, then God help us all." —DD

## Senators Hit Lowering of Atom Safeguards

Senior officials from the State and Energy departments put on a runaround November 19 before a Senate subcommittee trying to pin down reports that the Reagan Administration intends to lower US barriers against nuclear proliferation. After several hours of inconclusive exchanges between the nuclear bureaucrats and the Governmental Affairs Subcommittee on Energy, Nuclear Proliferation, and Government Processes, the net impression was that there's probably a lot of fire behind those smoking rumors.

The most persistent questioner was Senator John Glenn (D-Ohio), who said that "Over and over again, we have seen this Administration attempt to undermine the [proliferation] restraints that we have built up over the last five or six years, and even at this early stage, the negative effects of our obviously weakened interest in non-proliferation are beginning to manifest themselves around the world."

Charging that the Administration was naively looking upon plutonium reprocessing as a way of "making good use of garbage," Glenn said that the ominous implications of such a shift in American nuclear policy didn't seem to concern Reagan's planners. In fact, he said, "one might be excused for thinking that maybe this Administration feels non-proliferation is none of its business."

The Administration witnesses testified in a fashion that suggested that the issue was none of the Subcommittees's business. Pressed to provide assurances that Congress would be consulted sufficiently in advance of any policy changes to allow an effective legislative response, Henry E. Thomas IV, Assistant Secretary for International Affairs at the Department of Energy, said that "the planning process is a long one" and that "Congress has an opportunity to oversee the program."

When Subcommittee Chairman Charles H. Percy (R-Ill.) responded that he had been hoodwinked by similar Executive Branch assurances on other important policy shifts, the Administration witnesses persisted in refusing an ironclad commitment. A bill sponsored by Percy, the Nuclear Non-Proliferation Act of 1981 (S. 1812), was "premature" in its insistence on consultation, the Subcommittee was told by the outstanding fast footman of the proceeding, James L. Malone, Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs.

Malone, who helped peddle US nuclear technology abroad prior to joining the Reagan Administration, testified that "The need for nuclear suppliers to exercise restraint in the transfer of sensitive technologies and facilities is as valid as it ever was, but it is essential to recognize that proliferation is to an even greater

### Glenn's Bill of Particulars

*The following is from Senator Glenn's opening statement at the November 19 Senate hearing on the Administration's nuclear non-proliferation policies:*

...there was the State Department memorandum of October 2, 1981, which went out to the inter-agency group reviewing changes in nuclear non-proliferation law. The paper listed the areas where modifications of the Nonproliferation Act ought to be considered and an attachment contained what amounted to recommendations that certain of these changes be implemented. These changes include substantial undercutting of the full-scope safeguards criterion, elimination of sanctions provisions for nuclear violators, and elimination of truly independent review of executive branch nuclear export decisions. Under these circumstances, how can other nations that we are trying to get to accept full-scope safeguards take us seriously? We have given a new lease to their hopes that if they hold out a little longer, they will be able to renew trade with the United States without submitting to [International Atomic Energy Agency] safeguards across-the-board.

This brings me to the [Japanese] Tokai-Mura Plant, and US policy on reprocessing, in general. We are now approving pell-mell every transfer of spent fuel from Japan, Sweden, Spain, and Switzerland for reprocessing in Great Britain and France; and, as far as the Japanese Tokai plant is concerned, we have basically given them carte blanche. How can we discourage the export of this technology to sensitive regions, or persuade countries like India to forego reprocessing when, with every ounce of strength, it seems, we are telling the world that reprocessing makes sense and is a legitimate part of civilian nuclear programs? And let me add, that we are doing this when we know full-well that the IAEA has had great difficulty in safeguarding these facilities...

degree an international policy and security problem; the answer does not lie in simply imposing controls on the civil nuclear-fuel cycle." But if the US adheres to non-proliferation standards that other nations reject, Malone continued, "non-proliferation measures will become hostage to international commercial competition in the fierce bidding which accompanies the major nuclear transactions which can involve billions

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## New Stirrings on R&D Role in Economic Aid

One of the less-noted products of the recent 22-nation Cancun summit meeting was a bit of motion in the direction of fulfilling some of the languishing plans that came out of the 1979 United Nations Conference on Science and Technology for Development (UNCSTD), in Vienna.

The nearly forgotten UNCSTD has served mainly as a testimonial to the difficulty of organizing rich-and-poor collaborative development schemes under the auspices of the United Nations. What came out of Cancun was a new sense of reality about political means to achieve some of UNCSTD's ambitious plans for boosting and applying science and technology in the less-developed nations.

It was at the urgings of the developing countries—and with the reluctant approval of the US—that the 1979 Vienna conference agreed to establish a two-year "Interim Fund" for science and technology under the auspices of the United Nations Development Program.

The fund was to be supplied with voluntary contributions from both the developed and the developing nations, with an initial target of \$250 million during 1980-81. But so far the money contributed has fallen far short of the target. Last year, pledges totaling \$40 million were received, but less than half has actually materialized. Last month, at a further pledging conference, an additional \$2 million was promised, but so far, no money has been provided by many of the countries which have in the past been among the main sources of development funds, including Canada, Japan and the United Kingdom. The Carter Administration pledged \$10 million, but the request got lost in the legislative mill and the Reagan Administration doesn't plan to renew it.

This lack of support has put the future of the Interim Fund in doubt. Formally, the fund goes out of existence December 31, and it had originally been hoped that, by that time, a special committee established after the UNCSTD conference would have completed its study of how a long-term fund would be established. The idea was that this latter fund would be authorized by the United Nations General Assembly current meeting in New York, in time to take over from the Interim Fund when the latter's mandate runs out at the end of the year. (It was reported last week that the Assembly would meet the expiration problem by replacing the Interim Fund with a "Transitional Financing System" that would keep the UNCSTD spirit alive while more durable arrangements are explored.)

The main chance for breaking the deadlock seems to rest with a new, parallel initiative which was launched last year by a group of developing countries led by Tunisia and Mexico. Operating outside the immediate

auspices of the UN system, this group organized a delegation of ministers or other top-level government representatives from ten developing countries which made a preliminary visit earlier this year to various oil-producing states. The large dollar reserves of these countries are seen by many as the key to financing many future development projects—including efforts to build up indigenous science and technology facilities in Third World countries.

The strategy being proposed to this group, which has since expanded to a total of 20 developing countries, is to create an institutional framework by which developing countries can use a combination of oil wealth and private investment to sponsor their technological growth. One of the main reasons that the UNCSTD recommendations have failed to get off the ground has been skepticism in many OPEC nations about the UN's ability to handle the task. And since none of the nations provided significant voluntary contributions to the UNDP's Interim Fund, many developed countries have been reluctant to do so either.

Because of this, the countries involved in what is informally known as the "Tunisian initiative" have spent considerable effort wooing several of the large oil producing states. The support of Saudi Arabia, which was obtained when the country was visited in early June, has been particularly critical, not least because the US currently sees the Saudis as providing it with an important link with Third World politics in general.

Crown Prince Fahd, Saudi Arabia's Foreign Minister, was among the representatives of 20 developing countries which met in Caracas at the beginning of October. The outcome of this meeting was a joint statement in which the countries present committed themselves to supporting efforts to establish a new fund with a target, made up of different types of contributions, of just over \$1 billion for the period 1982-85.

The money would be used to pursue the objectives outlined by the UNCSTD meeting as necessary for

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## NUCLEAR

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of dollars."

Referring to Mr. Reagan's July announcement of a nuclear-policy review, Malone said that "this review is far from the stage where the Administration could say whether any... changes may be desirable. We do not anticipate submitting any proposals in the near term, and we would consult with the Congress before going forward with such proposals."

The Administration witnesses, however, refused to promise any more than that.

## ...The Vienna Plan, Minus Political Thrust

(Continued from page 5)

building up the scientific and technological capabilities of Third World countries. The arrangement would be similar to the International Fund for Agricultural Development, set up after the World Food Conference in Rome in the early 1970s with substantial OPEC funding, which has remained independent of the UN, although working closely with several multilateral aid bodies in promoting agricultural projects.

Supporters of this new approach claim to have the tacit support of the US State Department. A two-hour meeting was held with Deputy Secretary of State William Clark in September in what was later described as an "optimistic and cooperative" atmosphere. Secretary of State Alexander Haig has said that he regards technical cooperation with developing countries as an important component of the Administration's foreign policy. "Can the West and the developing countries find common interests? The answer is yes," Haig said in a speech before the American Bar Association in New Orleans in August. "The West alone offers the technology and know-how essential to overcoming the barriers to modernization. The developing countries, whatever their ideology, are beginning to recognize this fact. But a successful relationship also demands an imaginative approach on our part to both the economic and the security aspects of modernization."

It is their willingness to accept the conditions which the new Administration is placing on technical assistance that distinguishes the countries supporting the new initiative from the more conventional approaches being pursued through the UN. The idea is to retain the objectives outlined at Vienna, but without the anti-imperialist rhetoric—or the political commitment to broader, structural changes in the world's economy—that provided a major theme of the conference's recommendations. To the extent that the developed countries endorsed this approach at Cancun, and that the Tunisian initiative has also received the support of the Development Action Committee that coordinates the foreign-aid policies of members of the Organization for Economic Cooperation and Development in Paris, its chances of success are relatively good.

The major problem is likely to come at the UN itself. Many countries which supported the so-called "Vienna Plan of Action" are keen supporters of its political components, since they embody many of the demands for a so-called New International Economic Order. These nations still maintain that any long-term fund should be set up under the direct auspices of the UN, with its distribution being largely determined by the political voting power of a Third World majority. This is the approach to the broader issue of

"global negotiations" which provoked so much conflict at Cancun—and on which the US dug in its heels by insisting on conditions that would undermine many of the developing countries' goals. The outcome of this broader debate is likely to determine the form in which any new long-term initiatives for the support of science and technology emerge from the UN system—indeed whether such initiatives emerge at all.

But as things now stand, the prospects are reasonably bright for creation of an ample fund to be devoted to the scientific and technical objectives of the 1979 Vienna conference.—DD

## In Print

*Peer Review in the National Science Foundation*, by Jonathan R. Cole and Stephen Cole, latest segment of the ceaseless inquiry into the mysteries of peer review, concludes that it works quite well, even if reviewers are often in sharp disagreement. The authors, whose study was made for the National Academy of Sciences, concluded that "blinding," or concealment of applicants' identity, wouldn't make much of a difference in decisions. Their most important recommendation calls for NSF to look back systematically to evaluate how past granting decisions match up with later scientific developments. (106 pages, \$8.75, available from: National Academy of Sciences, Office of Information, 2101 Constitution Ave. NW., Washington, DC 20418.)

*Human Rights and Scientific Cooperation: Problems and Opportunities in the Americas*, final report of a workshop held at the January 1981 annual meeting of the American Association for the Advancement of Science by the AAAS Committee on Scientific Freedom and Responsibility. (161 pages, available without charge from: AAAS, Clearinghouse on Science and Human Rights, 1515 Massachusetts Ave. NW., Washington, DC 20005).

*Career Outcomes in a Matched Sample of Men and Women PhDs*, a study by the National Academy of Sciences' Committee on the Education and Employment of Women in Science and Engineering; reports that women generally lag in pay in rank in comparison to male counterparts. As for allegations of "reverse discrimination," the committee reports that "Even for the most recent 1975-78 PhDs, involuntary unemployment was two-and-a-half-times higher for women than for men." (95 pages, \$10, available from: National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418.)

## Tenure Jam Getting Worse, NSF Study Finds

The tenure logjam in science and engineering is getting worse, according to a new study by the National Science Foundation. The net effect is growth in senior faculty and a lower proportion of young doctoral-degree holders—defined as no more than seven years out of graduate school—in the nation's PhD-granting universities.

The study, based on a survey of 156 doctorate-granting institutions, found that the proportion of young doctorates in fulltime faculty posts dropped from 39 percent in 1968 to 28 percent in 1974 and to 21 percent in 1980. Meanwhile, faculty members with tenure went from 70 percent in 1974 to 74 percent of the total in 1980. "Only chemical engineering," NSF reported, "had a significantly lower tenure proportion in 1980 than in 1974"—a consequence of booming industry hiring away senior faculty at premium wages.

NSF's report writers refrain from shouting concern about the pileup of aging faculty and the accompany-

## University Pay at Bottom, Science Survey Reports

Academic pay is at the bottom while industrial pay is at the top "for almost all levels of experience and education and in all fields" of science and engineering, the Scientific Manpower Commission reports on the basis of its latest salary survey.

This year brought lots of new peaks in starting salaries, the Commission found, with average bachelor's-level petroleum engineers rising to \$26,650, while new PhDs in electrical and computer engineering were at \$33,516.

The Commission also reported that:

- "Among science and engineering doctorates, those working in industry averaged \$33,800 in 1979, followed closely by those in the federal government at \$33,400—still 15 percent above the overall median of \$29,100. The largest dollar increase since 1975 is for doctoral engineers; the smallest for social scientists.

- "Women doctorates earn considerably less than men in every field, in every activity, and at every level of experience, averaging 23 percent less overall. Among minority doctorates, Asians reported the highest salaries—\$28,200.

- "Teaching pays less than any other activity, and averages almost \$11,000 per year below salaries paid for management of research and development.

- "Academic salaries, already well below those in industry and government, fell further behind in 1981 as average salaries expressed in constant dollars dropped 2.3 percent over 1980, continuing a trend that

Field	Recent doctorates as percent of total doctoral faculty (a)	Percentage of recent doctorates desired by department heads <sup>1</sup> (b)	Difference between actual and desired percentage (c) = (a)-(b)
Total .....	22	30	-8
Engineering .....	22	30	-8
Physical sciences .....	15	25	-10
Biological sciences .....	20	27	-7
Mathematical sciences .....	26	30	-4
Social sciences .....	30	33	-3
Psychology .....	27	34	-7

<sup>1</sup>Median value of responses.

ing decline in job slots for newcomers, but their unease is evident. "Many observers," states the report, "believe that recent doctoral faculty play a key role in advances in academic research, although it has not been demonstrated that younger researchers are on the average more productive than their senior colleagues."

Nonetheless, concludes the report in a statement that will cause no offense, "Even though the issue of relative productivity is still an active research topic, there seems little dispute that younger faculty make important contributions."

(The report, NSF Document 81-318, 4 pages, is available without charge from: National Science Foundation, Division of Science Resource Studies, 1800 G St. NW., Washington, DC 20550.)

has lasted for several years."

(These and other data are in *Salaries of Scientists, Engineers and Technicians, A Summary of Salary Surveys*, by Eleanor Babco, 148 pages, \$25 per copy, available from: Scientific Manpower Commission, 1776 Massachusetts Ave. NW., Washington, DC 20036.)

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## US to End Funds for Vienna Systems Institute

The Reagan budget cutback may force the United States to pull out of one of the few residues of the longago Soviet-American detente—the International Institute for Applied Systems Analysis (IIASA), near Vienna, Austria.

An internationally staffed think tank that prefers to call itself a non-government institution, IIASA receives an American contribution—now \$2.5 million a year—that comes from the National Science Foundation but is delivered by the National Academy of Sciences, which is the US official participant in the multination venture. While a lot of science-policy makers have privately expressed doubts about IIASA's scholarly performance, the Institute has benefited from its symbolic value and from Soviet interest in learning about advanced western computer techniques. But that didn't matter one bit to Reagan and Stockman and company.

On November 4, the Academy got the word from the Office of Science and Technology Policy that the US Contribution would cease, effective January 1983. The cutoff, cruel as some may regard it, actually has a touch of generosity to it, since an immediate pullout of US funds—which is what the Office of Management and Budget originally proposed—would clash with IIASA's rule for one-year's notice and thus leave the threadbare National Academy of Sciences liable for \$2.5 million.

The Academy, along with other cutoff beneficiaries of the US Treasury, is naturally looking to private sources for replacement funds, but the pickings, if not lean, are much contested for, and at this point, US participation beyond 1982 is seriously in doubt.

Meanwhile, IIASA, unconnected with its budget situation, has selected a new director, Professor C.S. Holling, an ecologist from the University of British Columbia. He succeeds Roger Levien, who held the post for six years, and is returning to the US to become Director of Strategic Systems Analysis for Xerox. IIASA's new Deputy Director will be Allan Hirsch, who was Deputy Assistant Administrator for Environmental Processes and Effects at the US Environmental Protection Agency.

### *The Grant Swinger Papers Published by SGR*

SGR announces the publication of "The Grant Swinger Papers," by Daniel S. Greenberg, a 32-page collection of interviews with and articles attributed to the legendary director of the Center for the Absorption of Federal Funds. Copies are available for \$3.95 each (plus 50 cents domestic postage; \$1 overseas) from: SGR, PO Box 6226, Northwest Station, Washington, DC 20015.

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